PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

1 **	t's or agent's file reference 1193-PCT	FOR FURTHER ACTION	See For	m PCT/IPEA/416					
Internation	onal application No.	International filing date (day/r	nonth/year) Priority	date (day/month/year)					
PCT/	/EP2004/012498	04.11.2004	05.	11.2003					
Internation	onal Patent Classification (IPC) or natio	onal classification and IPC							
C07C23/16, C07C69/14, C07C43/184, C08F10/10, C08F110/10									
Applicant BASF AKTIENGESELLSCHAFT									
1	 This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 								
2.	This REPORT consists of a total of _	4	sheets, including this cover	er sheet.					
3.	This report is also accompanied by Al	NNEXES, comprising:							
	a. (sent to the applicant and	to the International Bureau) a t	otal of 2	sheets, as follows:					
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).								
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.								
	b. (sent to the International I	Bureau only) a total of (indicate	type and number of electr	onic carrier(s))					
	<u> </u>	•							
, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).									
4.	This report contains indications relating	ng to the following items:							
	Box No. I Basis of the	report							
	Box No. II Priority								
	Box No. III Non-establis	shment of opinion with regard t	o novelty, inventive step a	nd industrial applicability					
	Box No. IV Lack of unit	y of invention							
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement								
	Box No. VI Certain docu	ments cited							
	Box No. VII Certain defects in the international application								
	Box No. VIII Certain observations on the international application								
Date of submission of the demand			completion of this report						
Name and mailing address of the IPEA/EP			zed officer						
Faccimile	. Ma	Talaaha	no No						

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/012498

Box	No. I	Basis of the report						
1.		h regard to the language, this report is based on the internati cated under this item.	onal application in the language in	which it was filed, unless otherwise				
	This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:							
		international search (Rule 12.3 and 23.1(b))	40					
		publication of the international application (Rule 12.						
2.	With	h regard to the elements of the international application, thi		sheets which have been furnished to the				
2.	rece	viving Office in response to an invitation under Article 14 a report):						
		the international application as originally filed/furnished						
	$\overline{\boxtimes}$	the description:						
		pages _ 1-17		as originally filed/furnished				
		pages*						
		pages*	received by this Authority on					
	\boxtimes	the claims:		_				
	_	nos.		as originally filed/furnished				
			as amended (togethe	r with any statement) under Article 19				
		nos.* 1-11		30.06.2005 with letter				
		nos.*						
	П	the drawings:						
		sheets		as originally filed/furnished				
		sheets*						
	П	a sequence listing and/or any related table(s) – see Supple:						
	H		mental Box Relating to Sequence L	isung.				
3.	ш	The amendments have resulted in the cancellation of:						
		the description, pages		_				
			the claims, nos.					
4								
4.	Ш	This report has been established as if (some of) the amenthey have been considered to go beyond the disclosure as						
		the description, pages						
		the claims, nos.						
		the drawings, sheets/figs						
		the sequence listing (specify):						
		any table(s) related to sequence listing (specify):						
*	If ite	em 4 applies, some or all of those sheets may be marked "su	perseded."					

International application No.
PCT/EP2004/012498

Box			rticle 35(2) with regard to novelty, inventive step or industrial applicability; poorting such statement	
1.	Statement			
	Novelty (N)	Claims	1-11	YES
		Claims		NO
	Inventive step (IS)	Claims	_1-11	YES
		Claims		NO
	Industrial applicability	y (IA) Claims	1-11	YES
		Claims		NO

2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

- D1: EP-A-0 713 883 (KANEGAFUCHI KAGAKU KOGYO KABUSHIKI KAISHA), 29 May 1996 (1996-05-29)
- D2: WO 02/096964 A (BASF AKTIENGESELLSCHAFT; HUEFFER, STEPHAN; RATH, HANS, PETER; LANG, GA), 5 December 2002 (2002-12-05)

Novelty PCT (Article 33(2))

Document D1, which is considered to be the closest prior art, discloses a process for producing isobutene polymers by cationic polymerisation of isobutene in the presence of an initiator system (page 2, line 31 to page 3, line 3).

Suitable initiator compounds basically include "all organic compounds having at least one nucleophilically displaceable leaving group" (page 9, lines 10 to 12). Preferred compounds conform to (for example) the general formulas 1-A to 1-D on page 10 of D1. The use of the compounds described in the present application is not mentioned in D1, and therefore the subject matter of claim 1 is novel (PCT Article 33(2)).

Inventive step (PCT Article 33(3))

The application indicates that the problem addressed by the

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

invention is that of providing alternative initiator compounds for the cationic polymerisation of ethylenically unsaturated monomers.

The solution proposed in claim 1 of the application involves an inventive step (PCT Article 33(3)) because there is nothing in either document D1 or document D2 that might suggest to a person skilled in the art that the aforementioned problem can be solved by the compounds specified in claim 1.